

E.S.A Maintenance Report

TO: ESA Board of Directors
Theodore F. Lewis, Jr., *Executive Director*

FROM: Chris Muccie , *Superintendent, Safety Coord, N.J.D.E.P. C-2 Licensed Operator*

DATE: April 4, 2024

Report for March 2024 Activities

A. Problem Areas:

- Grease Traps Inspections – Starting to make progress and getting more done but still a long way to go as we only have me and dan at the moment and I am filling in for Kevin on regular duties for now.
- Land Rover –The easement is still blocked by two storage containers, a fence and cars. Spoke with them 3 times and ted spoke with them once . They should be sent a letter by the attorney advising they need to keep access to our manholes and easement free and clear.
- Circle Pump station still continues to be an issue with pump clogs and inflow/ infiltration . The frequency of pump start fails has gone down after pulling check valves and adjusting impellers gap spacing in the volute . I need t and m to check on the station and verify if the pump sizes are to small .
- Old Orchard is still having water intrusion issues on rainy days. The pump station is going to be inspected by T&M Monday April 8th .
- Maxwell Pump Station has rain water intrusion and needs be added to phase two lining project .
- Wampum pump station has no low level alarm and has only three reporting alarms, it needs more. This needs to be corrected.
- Pump Station Back Up Generators are required to be tested weekly. Our generators do not have automatic startup testing systems and as such this needs to be done manually. Due to staffing limitations we are lucky to be able to test start the generators manually monthly.
- We are making progress on the GIS system but still need to fix the missing wye card issue . a new tv camera truck with a locator can help . Also our Maps still need to be updated t and M is working on it .
- Lots of frame and covers are in bad shape around town . I ordered a bunch of new ones as we had no inventory left when I took over . there are delays with my order could be another month before they arrive .

- Shop / garage has a giant crack in the wall , and it Looks like a serious structure problem. Got a quote from Tand M .
- Shop hot water heater is leaking and needs to be replaced . Got a quote for replacement just need approval.

B. Activities

- updating OSHA and DEP compliance guidelines. To date of more than 21 that are required, approximately 18 have been completed
- Adjusted impellor clearance on both pumps at circle pump station .
- Daily calling to check phone lines at the OLD Orchard , Old Deal , Brookwood , Deep Woods ,Wampum , Circle, County Club, Crystal Inn, Eaton Crest, Industrial Way, Laurel Gardens, Lewis Street and Maxwell Road pumping stations.
- Every Monday and Thursday completed pump station maintenance and inspections
- Pulled pump 1 at circle pump station
- Vacuumed out and sprayed down Eatoncrest pump station .
- Main line blockage at Audi/ Land rover dealership .
- Completed monthly generator maintenance and crane inspections
- Completed Fall protection written program as required by OSHA
- Worked on grease trap inspections to prevent excess FOG in main lines.
- Peter dan and I Installed new sink at our shop to replace old broken sink .
- Met with Greg from TRWA to locate our meter chamber on 2000 lowther Drive .
- Maxwell pump station wouldn't start trouble shot it replaced spark plugs, block heater, and replaced battery .
- Replaced low level float at circle pump station
- Pulled pump 2 at circle pump station
- Attended meeting for liberty points project
- Completed monthly inspections and cycling of bypass valves / gate valves
- Add bio blocks at pump stations with access grease .
- Attended meeting for GPS devices in trucks .
- Went to Monmouth truck to get a Quote on new dump body for truck #34
- Started to work on jetting monthly trouble spot areas . crew size not allowing me to finish the list .
- Replaced battery at country club pump station generator .
- Trouble shot and fixed phase fail at crystal inn pump station .
- Vacuumed out and sprayed down old orchard pump station
- Completed OSHA record keeping plan , hot work written plan , sling safety written plan .
- clean up shop and reorganized it .

- vacuumed out and sprayed down crystal inn pump station
- video inspected taylors lane for phase two lining project (our camera head froze wasn't able to completed it)
- stoppage house call at 67 button wood (ours)
- completed monthly truck maintenance/ inspections
- Vacuumed out and sprayed down country club pumpstation
- Tv video inspected 28 Pearce, jetted lateral .
- Dug out cleanout at 28 Pearce ,hammer and chiseled out the driveway . raised cleanout with pvc pipe and put a curb box over it . filled in drive way with coal patched and tamped it .
- Laurel gardens pump 1 air bound . pulled air release valve and cleared grit from it .
- Pulled pump 1 at laurel gardens .
- Update monthly routines and set up a more structured routine for crew members .
- Met with t and M at Grant , Applebey and Clinton ave for walk through for liberty points project .
- Pulled check valve at laurel gardens
- Replaced transducer at laurel gardens pump station and . raised lead float .
- Peter dan and I replaced shop boiler valve
- Continued working on updating entire SDS file log
- Vacuumed out storm drains on Surrey lane for DPW.
- Inspected 29 college Ave sink hole (not ours)
- Blockage call 45 Oak Lane (not ours)
- Inspection at 5 Iris (contractor had me waiting for 40 minutes ,never showed up they will not get approval)
- Completed Monthly fixed ladder inspections
- Completed monthly fire extinguisher inspections at all pump stations

C. Items Needed:

- New Camera Truck – current vehicle is out of date and a safety hazard.
- New snake for clearing cleanouts to main. Existing snake is cumbersome and inefficient.
- New RACO scada system for pump stations to allow for online access to pump station issues.
- GIS access and mapping.
- A GPR (ground penetrating radar) unit which will allow for better cleanout and line location. Due to missing WYE-cards we cannot easily find cleanouts or lines.
- Ipad for use while performing markouts – we are currently using our phones to access PDF maps and the screen is too small to navigate.

- Vibration test meter and Megger meter for pumps. This will allow for routine testing of pumps to determine alignment, bearing and housing issues along with electrical wire insulation deterioration. There is a Operations and Maintenance of Pumps training class which will be offered at Rutgers. Ted has approved for the staff to take the course. Once the course is completed the staff will need the required meters to perform more preventative maintenance.

D. Coordination with the Public & other Agencies:

- New Jersey One Call System Mark outs (88) – *see attached*
- *Complaint Memorandum: (18)*
 - RN# 41 circle pump station channel 1 and 6*
 - RN# 42 circle pump station channel 4*
 - RN# 43 Old Orchard pump station channel 1*
 - RN# 44 181 Clinton Ave house stoppage (ours)*
 - RN# 45 Circle pump station channel 3 pump 2 start fail*
 - RN# 46 circle pump station channel 2 low level*
 - RN# 47 circle pump station channel 4 pump 2 fail*
 - RN# 48 Deep woods pump station channel 0 generator fail*
 - RN# 49 67 Buttonwood house stoppage (ours)*
 - RN# 50 Laurel pump station pump 1 fail*
 - RN# 51 Industrial pump station channel 7 lightning*
 - RN# 52 maxwell pump station channel 1 high water*
 - RN# 53 Old Orchard pump station channel 1 high water*
 - RN# 54 Laurel pump station channel 2 low water*
 - RN# 55 45 Oak lane house stoppage (not ours)*

E. Scheduled Monthly & Quarterly Activities:

- .completed monthly generator and crane inspections and maintenance.
- Jetted monthly trouble spot areas. **NOT finished due to staff limitations**
- Completed monthly inspection check list for harness, fall protection, wench and cable.
- Completed jack stand inspection form.

- Inspected all fire extinguishers at garage, shop , trucks and all pump stations.
- Inspected emergency eye wash station and replaced water in it ..
- Weekly generator startup inspections. **NOT PERFORMED DUE TO STAFF LIMITATIONS**
- Varying frequency - Lateral, manhole, mainline (SSO program) root treatments. **NOT finished due to staff limitations**
- Once every five years - Manhole inspections to determine deterioration. **NOT PERFORMED DUE TO STAFF LIMITATIONS**
- Hold monthly safety meeting with employees covering written safety policies .
- Driver Vehicle Inspection Reports; completed the reports for ESA vehicles operated daily as required by the NJDOT federal motor carrier safety regulations.
- Fuel all vehicles as needed. If the Board wishes to see the gallons please advise and we can include on the report.
- Monthly fixed ladder inspections / portable ladder inspections
- Grease trap inspections.
- Monthly force main walk through to check for signs of leakage

Attachments included : monthly mark- out list

Monthly fuel usage.